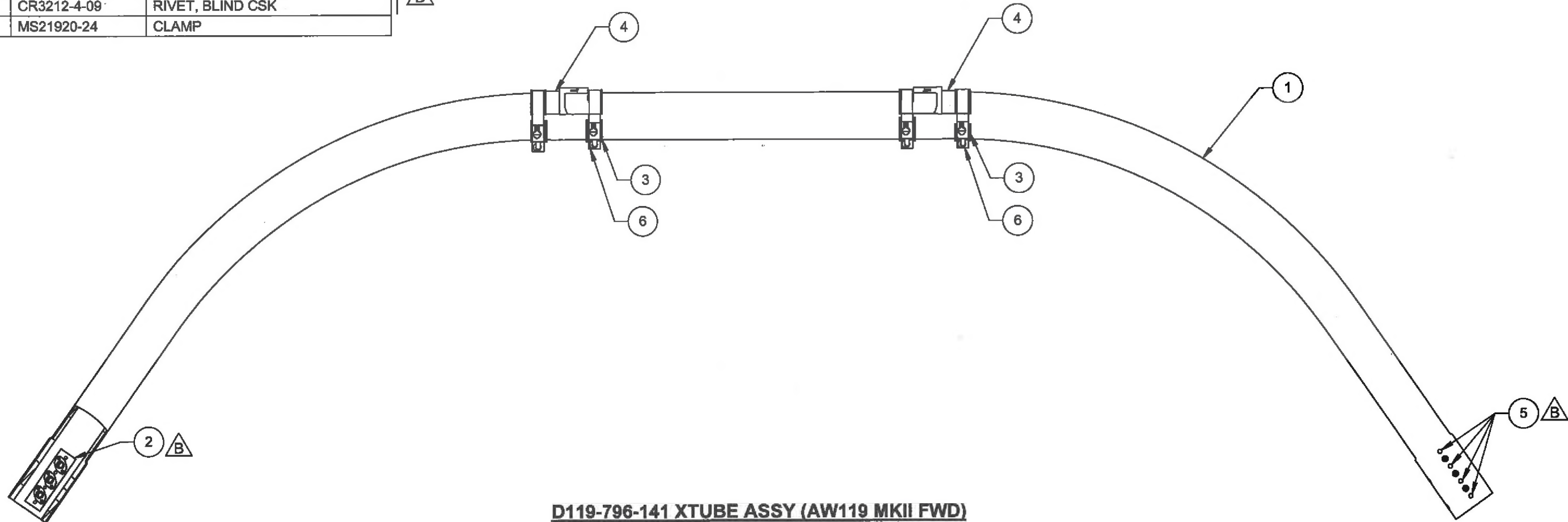


ITEM	QTY	P/N	DESCRIPTION
	X	D119-796-141	XTUBE ASSY (AW119 MKII FWD)
1	1	D119-796-141BND	CROSSTUBE, FWD
2	4	D2873-043	NUT PLATE ASSEMBLY
3	4	D5123-3	CLAMP CUSHION
4	2	D5124-1	FWD SUPPORT
5	16	CR3212-4-09	RIVET, BLIND CSK
6	4	MS21920-24	CLAMP



D119-796-141 XTUBE ASSY (AW119 MKII FWD)

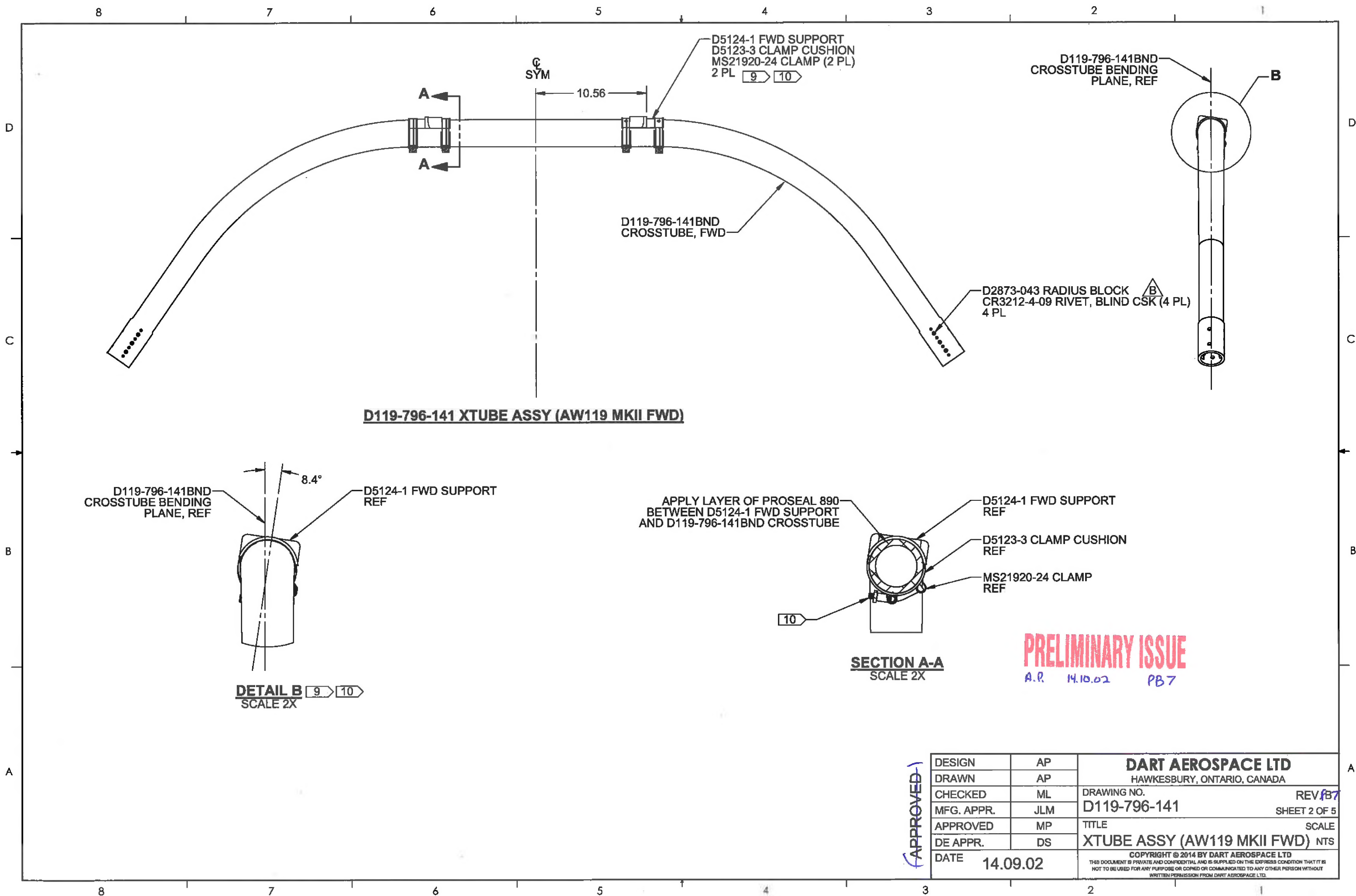
PRELIMINARY ISSUE

A.R. 14.10.02 P.B.7

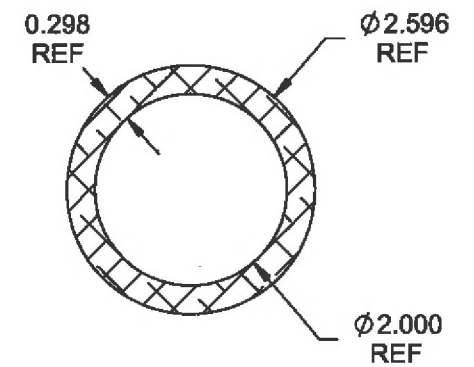
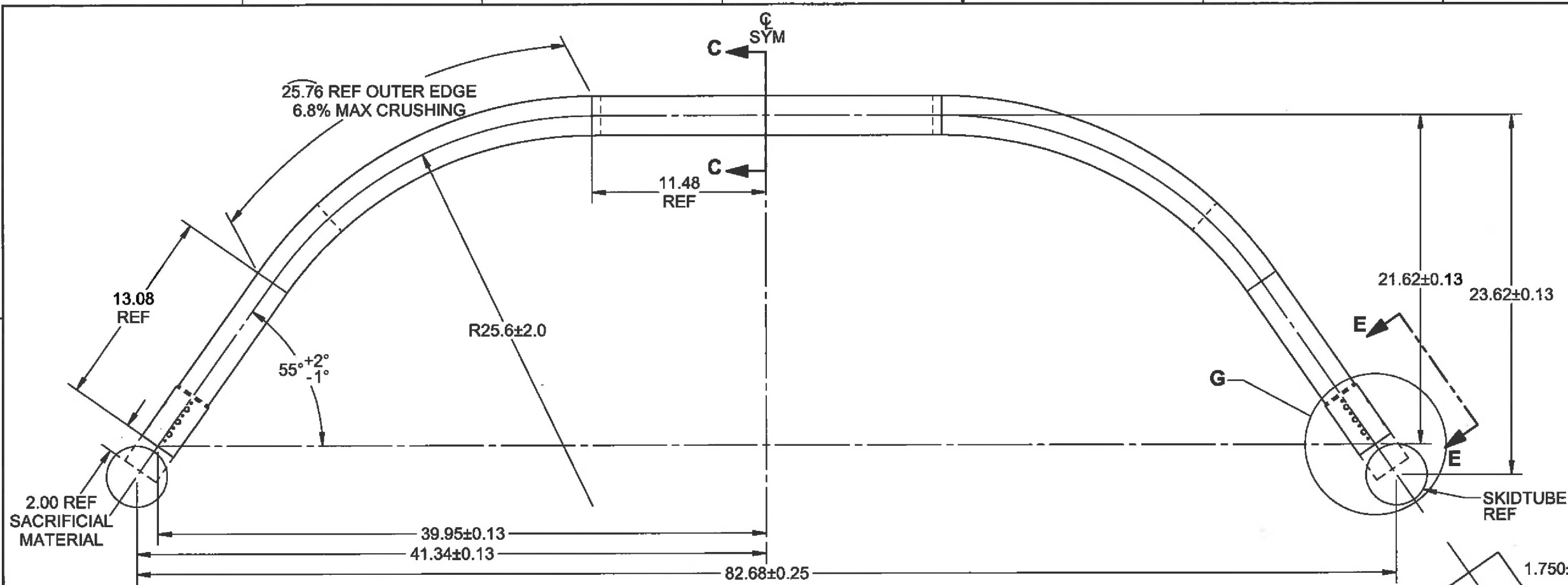
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY USING PART NUMBER "D119-796-141" AND BATCH NUMBER ON INSIDE OF CUFF PER QSI 044 6.4
- 7) WEIGHT: 18.10 lbs
- 8) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM DEFECTS SUCH AS SCRATCHES, NICKS OR DENTS. DEFECTS UP TO 0.005 MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 9) ABRASE MATING SURFACES OF D5124-1 FWD SUPPORTS AND CROSSTUBE WITH 180 GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.100 MIN THK LAYER OF PROSEAL 890 ON THE INSIDE CONCAVE SURFACE OF THE D5124-1 FWD SUPPORTS AND INSTALL AT AN 8.4° OFFSET FROM THE CROSSTUBE BENDING PLANE. INSTALL THE MS21920-24 CLAMPS AND D5123-3 CLAMP CUSHIONS WHILE WET.
- 10) TORQUE MS21920 CLAMPS 80 - 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY, THE NUT IS FACING AFT AND HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.

PB7	ADDED D2873-043 RADIUS BLOCK, CR3212-4-09 RIVETS, ADDED SKIDTUBE REFERENCE FOR LOCATING CUFF HOLES. RO-ORGANIZED NOTES AND REMOVED REDUNDANT INFORMATION	AP	14.09.02
A	NEW ISSUE	AP	14.08.09
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	ML	DRAWING NO. REV PB7	
MFG. APPR.	JLM	D119-796-141 SHEET 1 OF 5	
APPROVED	MP	TITLE SCALE	
DE APPR.	DS	XTUBE ASSY (AW119 MKII FWD) NTS	
DATE	14.09.02	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

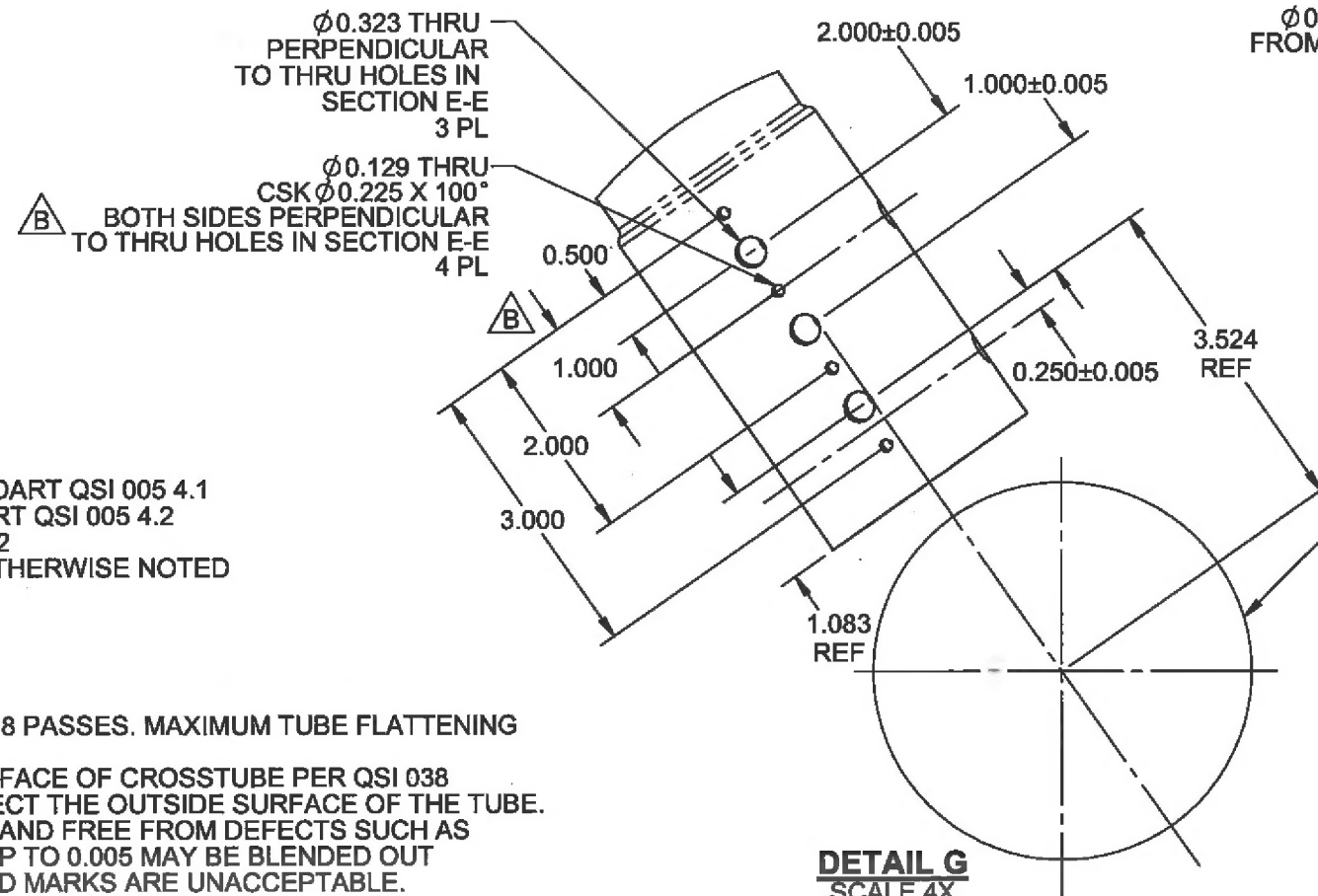


APPROVED	DESIGN	AP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AP		
	CHECKED	ML	DRAWING NO.	REV <b>PB7</b>
	MFG. APPR.	JLM	D119-796-141	SHEET 2 OF 5
	APPROVED	MP	TITLE	SCALE
	DE APPR.	DS	XTUBE ASSY (AW119 MKII FWD)	NTS
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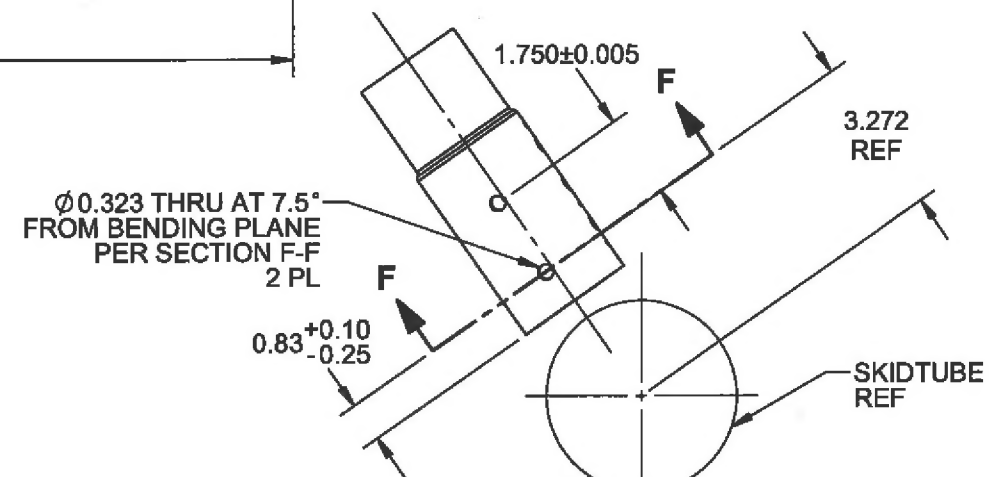


**SECTION C-C**  
SCALE 4X

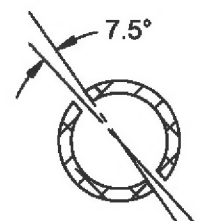
**D119-796-141BND CROSSTUBE, FWD** 9  
BENDING AND DRILLING DETAIL



**DETAIL G**  
SCALE 4X



**SECTION E-E**  
SCALE 2X



**SECTION F-F**

- NOTES:**
- 1) MATERIAL: MADE FROM D119-796-141TRN
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2  
PAINT OUTSIDE PER DART QSI 005 4.2
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 16.75 lbs
  - 8) PART IS SYMMETRICAL ABOUT CENTERLINE
  - 9) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6.8% BASED ON OD.
  - 10) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038
  - 11) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM DEFECTS SUCH AS SCRATCHES, NICKS OR DENTS. DEFECTS UP TO 0.005 MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

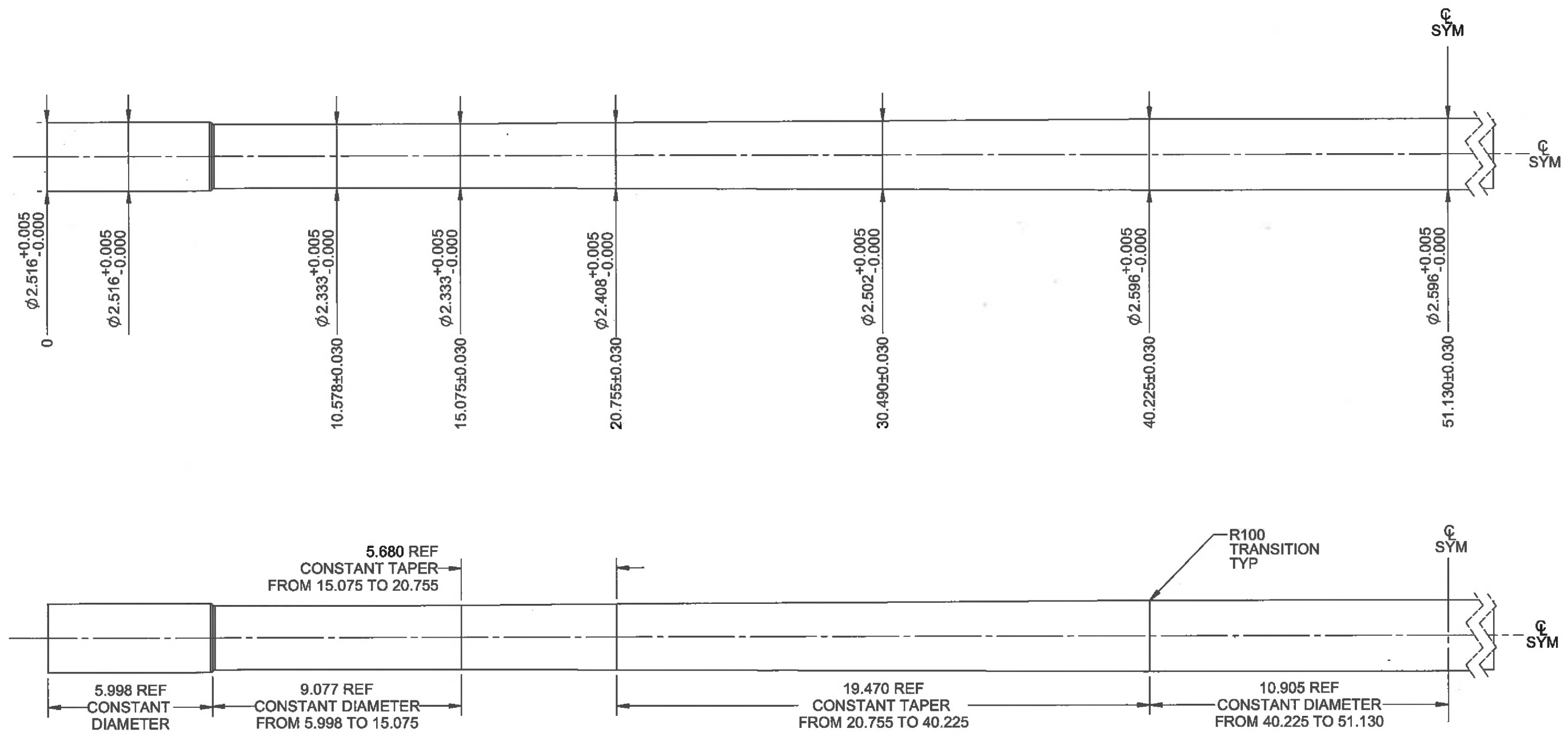
**PRELIMINARY ISSUE**

A.P. 14.10.02 PB7

DESIGN	AP
DRAWN	AP
CHECKED	ML
MFG. APPR.	JLM
APPROVED	MP
DE APPR.	DS
DATE	14.09.02

<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. <b>D119-796-141</b>	REV. <b>PB7</b>
TITLE <b>XTUBE ASSY (AW119 MKII FWD)</b>	SCALE NTS
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(APPROVED)



**D119-796-141TRN CROSSTUBE, FWD**

**PRELIMINARY ISSUE**

A.P. 14.10.02 P37

- NOTES:**
- 1) MATERIAL: MANUFACTURE FROM D6005-103  
FINISHED LENGTH = 102.26 ±0.020 (BEFORE BENDING/TRIMMING)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 16.75 lbs
  - 8) PART IS SYMMETRICAL ABOUT CENTERLINE

APPROVED

DESIGN	AP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	ML	DRAWING NO.	REV <b>P37</b>
MFG. APPR.	JLM	<b>D119-796-141</b>	SHEET 4 OF 5
APPROVED	MP	TITLE	SCALE
DE APPR.	DS	<b>XTUBE ASSY (AW119 MKII FWD)</b>	NTS
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